

## REMOTE PROGRAMMING OF A PROGRAM-CONTROLLED DEVICE

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Field of the Invention

The present invention relates to a method for remote programming of a program-controlled device, and to a system having an interface to receive program data and a legitimization, as well as to a remotely programmable, 5 program-controlled device, which includes a processor and a program memory.

Background Information

Modern vehicles increasingly use electronic control units to 10 control and regulate a wide variety of vehicle functions. In particular, the operation of vehicle engines is controlled by means of such control units. Electronic control units require an EDP program to execute their functions. Often, this EDP program must be modified retroactively because program faults 15 are discovered or else predefined values for operating parameters of a device controlled by the control unit need to be updated, or because functions of the EDP program are expanded or restricted. For this purpose, the control unit has an interface, so that corresponding modifications of the 20 EDP program are able to be input into the control unit and stored there in a program memory. However, the vehicle must visit a service facility for this purpose, where the new program data are imported into the control unit using a so-called service facility tester. Since the program is usually 25 of a confidential nature and, in addition, any unauthorized manipulation of the control unit's method of operation must be prevented, e.g., for reasons of liability and/or operating